

**SESSION XXI**  
**HAZARDOUS MATERIAL CONTROL**

**SESSION CHAIRPERSONS:**

**Mr. Randy Carar, Army Environmental Center**  
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**SUCCESS!**  
**The Fielding and Operation of a Hazardous Material & Hazardous Waste Software Program**  
**AF-EMIS**

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**The Objective and Scope:**

The objective of the presentation will be to provide the listener with a comprehensive understanding of both the successful fielding efforts, and subsequent successful operation of the Air Force-Environmental Management Information System (AF-EMIS), now deployed to over 150 Air Force and Air National Guard installations. It will begin with the background story to understand how and why this system was selected for the Air Force, what steps were taken to accomplish the fielding, what the ongoing support for the system consists of, what the future has in store for AF-EMIS, and the lessons learned from the fielding and operational support.

**The Steps:**

The first step in this effort was selecting a system compatible with Air Force business practices. The system also had to be acceptable and comparable, both in operational style and format to what the Air Force user was accustomed. At the conclusion of the 1994 Air Force Pollution Prevention Conference, a consensus was reached regarding the "in place" hazardous material tracking system – it did not meet the needs of the Air Force. In September 1994, the Air Staff directed a "tiger team" determine if another system might meet the needs of the Air Force better. The tiger team met several times over the next couple of months, and reviewed a number of candidate systems. In addition to the review of their system requirements, the team traveled and saw the systems in operation. All the systems demonstrated some excellent features, and each had some shortcomings. The task was to calculate which system had the most positives, and the least negatives. Each major command, including the Air Force reserves had one vote. HQ AFCEE was an observer in this process, but was not a voting member. Upon the conclusion of the vote count, the team recommended the Kelly AFB Environmental Management Information System (EMIS) to Air Staff. HQ USAF/CEV approved the recommendation in a policy letter dated 25 Oct 94. Approval from the Defense Environmental Security Corporate Information Management office was not received until 10 Jan 95, and the decision was included in the DESCIM IDP, 11 April 1995. With this approval HQ USAF/CEV directed the HQ Air Force Center for Environmental Management (HQ AFCEE) to proceed with the activation of EMIS. The Air Force issued a recommendation concurrence document signed by HQ USAF/CEV/LGM/LGS, SAF/AQX and HQ AFMOA/SGP on 17 January 95. This concurrence letter clearly demonstrated the overall support for the selection of this software application.

The second step was to transform the Kelly AFB EMIS from a system designed to support the needs of a single installation into one with the ability to meet the needs of bases from every Air Force command, and 78 Air National Guard installations. The resources for this effort came from, and continue to come from HQ USAF/ILEVQ. The execution and program management resources are located within HQ AFCEE. The first year effort of approximately \$1.5M resulted in the award of a contract to a software corporation located in San Antonio, and a training contract to a nationally known environmental firm. Over the next

two years, personnel from these two contractors, approximately 20 individuals, and 2-4 government personnel were totally dedicated to the transformation of the Kelly AFB EMIS to Air Force-EMIS. The initial contracts were awarded in the summer of 1995. The first fielding of AF-EMIS was to Holloman AFB in January 1996. There were many hurdles to overcome, and many remained.

The Kelly AFB EMIS was in day-to-day operation at the large Kelly AFB industrial complex when it was elected to become the system of choice for the US Air Force. With the developers close at hand, it was a proven commodity for the base, but now it would graduate from the security of the base and go it alone. To do this, it needed some assistance. The assistance came in many forms. Some of those were re-styling to be more "Windows" compliant, on-line help, extensive testing, user and system administrator guides, tutorials, connection of widows and orphans, curriculum development, and data conversion programs.

Not only were we faced with the software challenges, we were faced with the marketing of the AF-EMIS to the Air Force, and the unusual organizational structure of where it was to be placed – the Hazardous Material Pharmacy. In 1995 there was only a very loose organizational structure to the HMP based upon the Hazardous Material Pharmacy Implementation Plan, 31 May 95. The Plan, also known as the Organizational Change Package, indicated the logistics supply community would be the lead, in spite of the evidence the environmental organization was much more interested in the outcome of the process. To get buy-in from the entire Air Force community a steering group was formed with representatives from all commands and all functions effected by hazardous material management. The steering group met, a plan was agreed to, and the steering group did not meet again for a year. They did not meet again for a year, because there was no need to meet. HQ AFCEE had enough direction to take them a year to complete....and then some.

The third step was making AF-EMIS operational for every user. Making a system operational is much more than delivering a piece of software. This was especially true of AF-EMIS, since initially there was no mandatory direction to use it. The direction to HQ AFCEE was to make AF-EMIS available to every Air Force and Air National Guard installation. This objective was met by January 97. The tasking was not to ensure its full operation at every base, nor to control whether the base used all the modules. The Air Staff looked towards the bases and their major commands to take up the tool and use to its maximum potential.

To demonstrate its capabilities and encourage use, HQ AFCEE devised a series of training experiences to better prepare the hazardous material pharmacy personnel to use it. A series of system administrator training classes were conducted in regional locations around the world. A total of 26 sessions were held over a one-year time span. In addition, US Air Force School of Aerospace Medicine stepped up and joined in partnership with HQ AFCEE to offer the AF-EMIS class. Approximately six classes have been held every year since 1996, and all have been at capacity. The AF-EMIS newsletter was first published in 1996 and over 600 pages of on-line help were completed in time for AF-EMIS version 2.0.

The current version of AF-EMIS is 5.0. The next version 6.0 is expected to be released at the end of 1998. This version will include archiving, and a greatly expanded and improved Chemical Abstract Table, and environmental reporting feature, specifically Emergency Planning and Community Right-to-Know, Section 313. Features activated or enhanced since AF-wide deployment began include:

- 2.0 -- bar-coding
- 3.0 -- waste module
- 4.0 -- QSL and HMIS interface
- 5.0 -- standard base supply interface.

### The Results:

AF-EMIS is a success both to the user and to the pocketbook. AF-EMIS is a very economical system. Hardware requirements are closely identified with the Air Force standards for personal computers, and the software is government-owned. AF-EMIS, used in conjunction with the hazardous material pharmacy concept, is responsible for saving the Air Force millions of dollars. AF-EMIS is also supplying environmental information quicker, and easier than any other system.

### The Continuing Developments:

To maximize performance, and to comply with changes in Air Force direction as well as other imposed mandates, AF-EMIS is under continual development. The AF-EMIS configuration control board meets regularly and encourages user participation. Every change request, without regard to its magnitude is assigned a change request number. The requester is provided the date and time of the configuration control board meeting, so a call may be made during the meeting to advocate for the proposed change. This is done through a "meet me" conference call. The meeting handouts are posted on the HQ AFCEE web site in advance of the meeting.

AF-EMIS is becoming a standard system, easing the day-to-day business practices for those managing hazardous materials. Judging by the new change requests being received, upcoming improvements will focus on interfaces with other systems, and improved reporting.